

FINDING OF NO SIGNIFICANT IMPACT

Stabilization Treatments for Historic Slave Community Chimneys Cumberland Island National Seashore

Cumberland Island National Seashore, Historic Plantation Slave Community Chimneys

Indians originally occupied Cumberland Island from the archaic time period until European settlement in the mid-16th century. Spanish settlers established the first permanent settlement at this time but lost influence to the English in the early 18th century. The Creek Indian Toonahawi named the island "Cumberland" after the English Duke of Cumberland.

By the mid-18th century, land grants were given; however, there was no extensive development at the time. In the late 18th century, Revolutionary War General Nathanael Greene purchased land on the island. Several years after the General's death, his widow, Catherine, and her new husband Phineas Miller, built the Dungeness mansion. The mansion and surrounding property were retained by Catherine's descendants until the Civil War.

Robert Stafford purchased Dungeness, as well as other Greene holdings, but later abandoned it after the Civil War. The mansion burned in 1866. In 1881, Thomas Carnegie acquired Dungeness and, in the next two years, several other Stafford holdings. The Dungeness mansion was rebuilt in 1884 by Thomas and Lucy Carnegie, but burned again in 1959.

In 1977, the National Park Service (NPS) Southeast Archeological Center documented the remains of 26 nineteenth-century chimneys associated with the slave quarters from the Cumberland Island plantation era. Nineteen chimneys remain standing, but in various stages of ruin. The former Stafford Plantation slave housing complex is now known as "The Chimneys".

NPS staff undertook stabilization of certain chimneys in the 1970s, with the installation of wood shoring at three chimneys, successfully slowing the collapse of two chimneys over the following decade.

PREFERRED ALTERNATIVE

The preferred alternative will provide stabilization treatments to slow temporarily the deterioration of the remaining standing chimneys until further reconstruction and preservation work can be undertaken.

ALTERNATIVES CONSIDERED

The NPS considered two alternatives in the Environmental Analysis (EA) process: one action alternative and a no action alternative. The following provides a brief description of these alternatives. The alternatives are described in full detail in the EA.

Alternative A (No Action)

Alternative A describes the action of continuing the present management operations and condition of "The Chimneys". The no action alternative does not imply or direct discontinuing the present action or removing existing uses, developments, or facilities. The no action alternative provides a basis for comparing the management direction and environmental consequences of the preferred alternative. Should the no action alternative be selected, the NPS would respond to future needs and conditions associated with the chimney's deterioration without major actions or changes in the present course.

Alternative B (Preferred)

The preferred alternative will use temporary stabilization to address the lateral instability (side to side movement) of standing chimneys and the support of the gravity loads. Lateral stability would also include tying the structure together to maintain its structural form. Work will require installation of lateral bracing (which consists of pouring concrete footings external to the chimney, installing strut/columns, placing collars around mantels, grouting cracks in mantels, and grouting between collar and masonry); and installation of front shaft support (which consists of timber grillage on existing hearths, installing columns, installing beams, grouting and shimming under chimney lintels or masonry, and connecting the assembly to the lateral bracing). Trees, stumps and roots adjacent to chimney bases that are not providing structural support will be cleared if their removal can be accomplished without further damaging the chimneys.

The concept of bracing is to provide a braced ring around the center of the base and a separate shore for the front face of the shaft. This arrangement is designed to minimize the disturbance to potential buried resources and minimize disturbance to the existing chimney and prevent damage to the delicate tabby masonry. These techniques will not address the deterioration of the tabby brick and mortar, which is progressing in all of the chimneys.

Masonry holes will be filled with dry stacked brick as a temporary measure. Bricks will be salvaged from other previously collapsed chimney sites to supply as many bricks as possible. Several sizes of bricks are required for repairs. The recommended mixture for the tabby mortar for new bricks is a 1:1:2 mix, parts by volume, of hydraulic lime: hydrated lime: pulverized oyster shell of approximately two parts. Adjustments to the recommended mixture may be determined through the preparation of a range of test samples, using from two to four parts oyster shell.

Each chimney has been assigned a stabilization priority designation from A to D and reflects the different stages of deterioration of each chimney. An "A" designation represents the highest priority for stabilization and is assigned to chimneys that retain full height. A "B" designation represents a chimney that retains full height, but has a collapsed lintel and/or overmantel. A "C" designation represents a chimney that has full or partial collapse of the chimney shaft. A "D" designation represents a chimney that is in complete ruin and represents the lowest priority for stabilization.

ENVIRONMENTALLY PREFERRED ALTERNATIVE

The CEQ has stated that the environmentally preferred alternative is the alternative that will promote the national environmental policy expressed in the National Environmental Policy Act (NEPA) of 1969, Section 101(b). The environmentally preferred alternative is determined by applying the six following NEPA criteria. The environmentally preferred alternative will:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations;
- Assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings;
- Attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other undesirable and unintended consequences;
- Preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment which supports diversity and variety of individual choice;
- Achieve a balance between population and resource use which will permit high standards of living and a wide sharing of life's amenities; and
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

The NPS has determined that the environmentally preferred alternative is Alternative B (Preferred Alternative) because it improves upon the no action alternative, embracing the tenets expressed in the NEPA policy discussed above.

Alternative B makes the most progress towards securing preservation of "The Chimneys" for future generations. "The Chimneys" are an important part of our national heritage linking us to our past, providing a glimpse into the lives of plantation owners and slaves on Cumberland Island National Seashore (CUIS). The stabilization treatments reduce visual (aesthetic) impacts to "The Chimneys" through use of salvaged (recycled) brick from other archeological sites, a recommended mixture for tabby mortar, and construction with simple hand tools. Alternative B balances the widest range of beneficial uses of the environment, stabilizing an important cultural resource within its historic landscape context, yet respecting the surrounding landscape of live oak and red cedar trees, vines and groundcover. Trees and vines that provide structural support to some of the chimneys or serve as important wildlife habitat will not be removed.

In the broadest sense, Alternative B would a) fulfill the responsibilities of each generation as trustee of the environment for succeeding generations; b) assure for all Americans safe, healthful, productive, and aesthetically and culturally pleasing surroundings; c) attain the widest range of beneficial uses of the environment without degradation, risk of health or safety, or other

undesirable and unintended consequences; and d) preserve important historic, cultural, and natural aspects of our national heritage and maintain, wherever possible, an environment that supports diversity and variety of individual choice.

WHY THE PREFERRED ALTERNATIVE WILL NOT HAVE A SIGNIFICANT EFFECT ON THE HUMAN ENVIRONMENT

As defined in 40 CFR §1508.27, significance is determined by examining the following criteria:

Impacts that may have both beneficial and adverse aspects and which on balance may be beneficial, but that may still have significant adverse impacts which require analysis in an EIS:

No major adverse impacts were identified that would require analysis in an environmental impact statement. No impacts to geology and topography; prime and unique farmland; air quality; water resources; biotic communities; threatened, endangered and candidate species and species of special concern; ethnographic resources, or cultural landscapes; soundscape or lightscape management; environmental justice; or the chimneys' socioeconomic environment were identified for the preferred alternative. Construction related impacts to soils will be adverse, but minor and short-term. Impacts to archeological resources and the historic structure will not be adverse. Adverse construction related impacts to visitor use and experience and Seashore operations will be short-term and minor in intensity. Beneficial impacts to visitor use and experience and Seashore operations will be long-term and moderate in intensity.

Degree of effect on public health or safety:

There is currently no public access to "The Chimneys" site. Construction vehicles, equipment, or material will not be stored outside the boundaries of the identified staging and stockpiling area without prior approval of CUIS staff. Impacts will be adverse, but minor and short-term, lasting only as long as construction.

The preferred alternative may have a negative, minor impact on visitor use and experience on adjacent parts of CUIS in terms of the temporary construction noise at the site. However, construction activity will be restricted to only simple hand tools and small powered equipment if necessary, using no mechanized equipment other than for transport of materials to the site. In addition, construction will be done between dawn and dusk eliminating night time noise and the use of artificial lighting. Overall such impacts will be adverse, but minor and short-term, and will not be expected to affect appreciably either the number of visitors to CUIS or their average length of stay.

Unique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas:

As described in the EA, prime farmlands, wetlands, wild and scenic rivers, and ecologically critical areas will not be affected.

Implementation of the preferred alternative will not alter the topography, vegetation, circulation features, spatial organization or land use patterns of "The Chimneys" cultural landscape. In addition, any visual, audible, and atmospheric intrusions associated with construction will be temporary and negligible, lasting only as long as construction.

Overall, impacts to "The Chimneys", including cumulative impacts, would be beneficial, long-term, and range in intensity from minor to moderate. After applying the Advisory Council on Historic Preservation's criteria of adverse effects (36 CFR Part 800.5, *Assessment of Adverse Effects*), the NPS concluded that implementation of the preferred alternative will have no adverse effect on the archeological resources of "The Chimneys".

Degree to which effects on the quality of the human environment are likely to be highly controversial:

There were no highly controversial effects identified during either preparation of the EA or the public review period.

Degree to which the possible effects on the quality of the human environment are highly uncertain or involve unique or unknown risks:

There were no highly uncertain, unique or unknown risks identified during either preparation of the EA or the public review period.

Degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration:

The preferred alternative neither establishes a NPS precedent for future actions with significant effects nor represents a decision in principle about a future consideration.

Whether the action is related to other actions with individually insignificant but cumulatively significant impacts:

Impacts of the preferred alternative identified in the EA were to soils, archeological resources and the historic structures. As described in the EA, cumulative impacts were determined by combining the impacts of the preferred alternative - Stabilization Treatments for Historic Slave Community Chimneys - with other past, present, and reasonably foreseeable future actions.

Because significant archeological resources, if discovered, would be avoided during implementation of the preferred alternative, the preferred alternative would not be anticipated to contribute to the cumulative impacts of other past and reasonably foreseeable future actions on archeological resources. The minor to moderate construction-related adverse impacts of the preferred alternative, in conjunction with the adverse impacts of other reasonably foreseeable

future actions, would result in adverse cumulative impacts to soils, the historic structure, visitor use and experience, and Seashore operations ranging in intensity from negligible to minor, depending upon both the scope of the potential actions and the location. However, the adverse impacts of the preferred alternative would be a relatively minor component of the overall cumulative impact, due to the limited scope of the preferred alternative.

The minor to moderate beneficial impacts that implementation of the preferred alternative would have on visitor use and experience and Seashore operations, in conjunction with the beneficial impacts of other reasonably foreseeable future actions, could result in net beneficial cumulative impacts ranging in intensity from minor to moderate.

Degree to which the action may adversely affect districts, sites, highways, structures, or objects listed on National Register of Historic Places or may cause loss or destruction of significant scientific, cultural, or historical resources:

As described in the EA, a number of long-term, minor, adverse and beneficial impacts to the National Register of Historic Places listed Stafford Plantation Historic District will occur as result of implementing the preferred alternative.

Degree to which the action may adversely affect an endangered or threatened species or its critical habitat:

As described in the EA, no threatened, endangered and candidate species and species of special concern are known to inhabit "The Chimneys" or the general vicinity. Construction related noise could potentially disturb transient bird species but such adverse impacts would be temporary, lasting only as long as construction, and negligible, because suitable habitat for transient birds is found throughout the region. There is no critical habitat in "The Chimneys" or the general vicinity.

Whether the action threatens a violation of federal, state, or local environmental protection law:

The preferred alternative violates no federal, state, or local environmental protection laws.

IMPAIRMENT OF PARK RESOURCES OR VALUES

In addition to reviewing the list of significance criteria, NPS determined that implementation of the preferred alternative will not constitute an impairment of the Seashore's resources and values. This conclusion is based on a thorough analysis of the impacts described in the EA, the agency and public comments received, and the professional judgement of the decision-maker in accordance with the National Park Service's *Management Policies, 2001* (December 27, 2000). As described in the EA, implementation of the preferred alternative will not result in major, adverse impacts to a resource or value whose conservation is (1) necessary to fulfill specific purposes identified in the establishing legislation or proclamation of CUIS; (2) key to the natural

or cultural integrity of the Seashore; or (3) identified as a goal in the Seashore's general management plan or other relevant NPS planning documents.

PUBLIC INVOLVEMENT

The EA was made available for public review and comment during a 30-day period ending June 25, 2004. Five (5) responses were received.

As part of the scoping process for this project, the NPS contacted the USFWS regarding endangered and threatened species compliance. The USFWS stated "Although there are federally listed species on Cumberland Island, there are no listed species at the Chimneys location where the stabilization measures will be carried out. No federally listed species' habitat will be affected by the project. Therefore, we concur with your determination that this project is not likely to adversely affect federally listed species. In view of this, we believe that the requirements of section 7 of the Endangered Species Act have been satisfied", (Sandra S. Tucker, Field Supervisor, letter to Jerre Brumbelow, Superintendent, CUIS, 28 July 2004).

The office of the Georgia Department of Natural Resources, Historic Preservation Division (SHPO) concurred that the preferred alternative will have no adverse effect on "The Chimneys" (Richard Cloues, Georgia Deputy State Historic Preservation Officer, Letter to Jerre Brumbelow, Superintendent, CUIS, 16 July 2004).

Responses to remaining comments are provided in the Errata Sheet attached to this document.

All comments received in response to the scoping notices have been duly considered and will remain in the project administrative record.

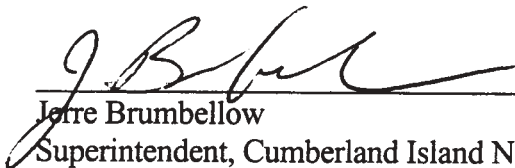
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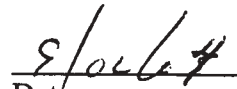
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The preferred alternative does not constitute an action that normally requires preparation of an environmental impact statement (EIS). The preferred alternative will not have a significant effect on the human environment. Negative environmental impacts that could occur are negligible or minor in intensity. There are no significant impacts on public health, public safety, threatened or endangered species, sites or districts listed in or eligible for listing in the National Register of Historic Places, or other unique characteristics of the region. No highly uncertain or controversial impacts, unique or unknown risks, significant cumulative effects, or elements of precedence were identified. Implementation of the action will not violate any federal, state, or local environmental protection law.

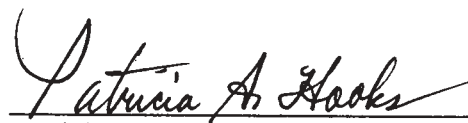
Based on the foregoing, it has been determined that an EIS is not required for this project and thus will not be prepared.

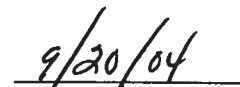
Recommended:


Jerre Brumbellow
Superintendent, Cumberland Island National Seashore


Date

Approved:


Patricia Hooks
Director, Southeast Region


Date

Errata Sheet

Stabilization Treatments for Historic Slave Community Chimneys

Comments made during the 30-day public review of the EA are as follows:

- 1. Federal funds should not be expended on historic resources located within “retained rights” properties still retained by private owners that deny public access.**

Several properties at CUIS are held within reserved estates that allow estate holders certain retained rights both within and outside the boundaries of their property. Section 4(a) of the Act establishing CUIS (Public Law 92-536) stipulated that, “any owner or owners of improved property on the date of its acquisition by the Secretary may, as a condition of such acquisition, retain for themselves and their successors or assigns a right of use and occupancy of the property for noncommercial residential purposes, for twenty-five years, or, in lieu thereof, for a term ending at the death of the owner or his spouse, whichever is later.”

Although many of the historic resources on Cumberland Island are within reserved estates and are therefore not currently within direct NPS jurisdiction, specific resource treatments are still provided for those historic resources since they will eventually transfer to direct NPS stewardship upon the expiration of the lease agreements in which they are contained. Accordingly, the NPS acknowledges its responsibility to work closely with holders of reserved estate resources. The NPS may choose to undertake preservation work on historic resources located on reserved estate properties when those resources are considered exceptionally significant, are not in active use by the estate holder, and require a high level of cultural resources management technical knowledge and skill. The Stafford Slave Community Chimneys meet the criteria for NPS intervention.